

AMENDMENTS TO THE CLAIMS:

Claims 1, 3, 5, 9, 11, 13 and 14 have been amended herein. Please note that all claims currently pending and under consideration in the referenced application are shown below. Please enter these claims as amended. This listing of claims will replace all prior versions and listings of claims in the application. Please enter these claims as amended.

Listing of Claims:

1. (Currently amended) A peptide that comprises at least two contiguous LHRH decapeptide sequences wherein the amino acid glycine at position 6 of at least one of the constituting LHRH decapeptides is replaced by a dextrorotatory amino acid with a side chain that can be coupled to a carrier compound wherein said contiguous decapeptides are joined with a terminus to terminus linkage.

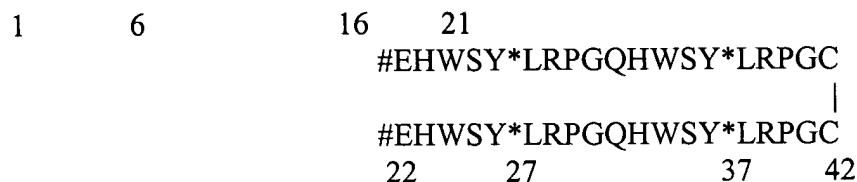
2. (Original) A peptide according to claim 1 characterized in that it comprises an amino acid sequence that comprises the structure:

1 6 16 21
#EHWSY*LRPGQHWSY*LRPGC

wherein the amino acid * at position 6 or 16 is a dextrorotatory amino acid with a side chain that can be coupled to a carrier compound and the other amino acid * is either glycine or a dextrorotatory amino acid with a side chain that can be coupled to a carrier compound.

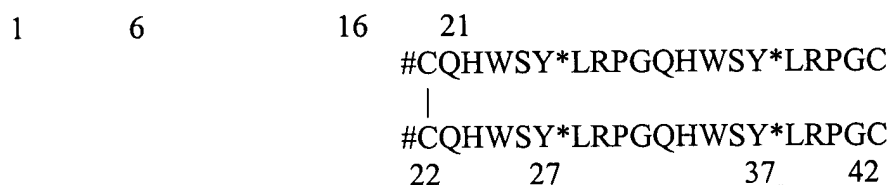
3. (Currently Amended) ~~Peptides according to claim 1 that~~ A peptide that comprises at least two contiguous LHRH decapeptide sequences wherein the amino acid glycine at position 6 of at least one of the constituting LHRH decapeptides is replaced by a dextrorotatory amino acid with a side chain that can be coupled to a carrier compound wherein said decapeptides are joined with a terminus to terminus linkage and are dimerised or multimerised.

4. (Original) A peptide according to claim 3 and comprising the structure:



wherein the amino acid * at position 6 or 16 or 27 or 37 is D-lysine or D-glutamine or another dextrorotatory amino acid with a side chain that can be coupled to a carrier compound and the other amino acid * is either glycine or D-lysine or D-glutamine or another dextrorotatory amino acid with a side chain that can be coupled to a carrier compound.

5. (Currently Amended) A peptide according to claim 3 and having the structure:



wherein a cysteine is placed before the glutamic acid at position 1 in LHRH and the amino acid * at position 6 or 16 or 27 or 37 is D-lysine or D-glutamine or another dextrorotatory amino acid with a side chain that can be coupled to a carrier compound and the other amino acid * is either glycine or D-glycine or D-glutamine or another dextrorotatory amino acid with a side chain that can be coupled to a carrier compound.

6. (Original) A composition in which a peptide in accordance with claim 1 is coupled to a carrier compound.

7. (Original) A composition in accordance with claim 6 wherein the carrier compound is a protein.

8. (Original) A composition in accordance with claim 7 wherein the carrier compound is KLH or ovalbumin.

9. (Currently amended) A ~~composition~~ peptide in accordance with ~~claims~~ claim 1 additionally comprising a mild adjuvant.

10. (Original) A composition in accordance with claim 9 wherein the mild adjuvant is an oil phase of a water-in-oil emulsion or a double oil emulsion.

11. (Currently amended) A vaccine comprising a ~~composition~~ peptide in accordance to claim 1.

12. (Original) A method for inoculating an animal with a vaccine according to claim 11.

13. (Currently amended) A method for inoculating an animal with a vaccine according to claim 11 wherein ~~the~~ an effective amount is less than about 1 mg.

14. (Currently Amended) A method to ~~effect~~ affect one or more reproductive or behavioral characteristics of an animal, characterized in that said animal is vaccinated in accordance with claim 12.

15. (Original) A method to immunocastrate a pig, characterized in that said pig is vaccinated in accordance with claim 12.